

Claims:

1. An expandable tubular coupling including first and second thread portions each comprising a plurality of inter-engaging teeth, wherein at least one tooth on the first thread portion engages a corresponding tooth on the second threaded portion and the remainder of said inter-engaging teeth define respective gaps therebetween.
2. An expandable coupling arrangement for first and second expandable tubulars, the coupling comprising:
 - a male thread portion on an end of a first tubular; and
 - a female thread portion on an end of a second tubular,
 - the thread portions having flanks, wherein when the male and female thread portions are engaged, at least one flank of the male thread portion abuts a corresponding flank of the female thread portion, and the remaining corresponding flanks of the thread portions define gaps therebetween.
3. An expandable coupling arrangement as claimed in claim 2, wherein the arrangement is adapted for expansion at least partly by a rotary expansion tool.
4. An expandable coupling arrangement as claimed in claim 2, wherein the arrangement is adapted for expansion at least partly by a cone expansion tool.
5. An expandable coupling arrangement as claimed in claim 2, wherein the arrangement is adapted for expansion at least partly by hydraulic pressure.
6. An expandable coupling arrangement as claimed in claim 2, wherein the arrangement is adapted such that once the thread portions are engaged and are subsequently expanded, the gaps between the corresponding flanks accommodating for differential expansion between the male and female thread portions.

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7. An expandable coupling arrangement as claimed in claim 2, wherein the arrangement is adapted such that once the thread portions are engaged and are subsequently expanded at least one of the gaps is closed and adjacent flanks are moved to close the at least one gap and to abut each other.
8. An expandable coupling arrangement as claimed in claim 2, wherein a plurality of flanks of the male thread portion abut corresponding flanks of the female thread portion.
9. An expandable coupling arrangement as claimed in claim 2, wherein the abutting flanks are provided at corresponding end regions of the first and second thread portions.
10. An expandable coupling arrangement as claimed in claim 2, wherein the abutting flanks are provided in a central region of the corresponding male and female thread portions.
11. An expandable coupling arrangement as claimed in claim 2, wherein the gaps between corresponding flanks of the male and female thread portions are provided by employing a variable thread pitch in at least one of the male and female thread portions.
12. An expandable coupling arrangement as claimed in claim 11, wherein the variable thread pitch is provided on both thread portions.
13. An expandable coupling arrangement as claimed in claim 11, wherein the thread portions include roots and the variable thread pitch is achieved by varying the width of the roots of the respective thread along the length thereof.

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14. An expandable coupling arrangement as claimed in claim 11, wherein the thread portions include crests and the variable thread pitch is achieved by varying the width of the crests of the respective thread along the length thereof.
15. An expandable coupling arrangement as claimed in claim 2, wherein the gaps between corresponding flanks of the male and female thread portions are provided in a central region of the threads.
16. An expandable coupling arrangement as claimed in claim 2, wherein the gaps between corresponding flanks of the male and female thread portions are provided in an end region of the threads.
17. An expandable coupling arrangement as claimed in claim 2, wherein a deformable sealing material is provided in the gaps between corresponding flanks of the male and female thread portions.
18. An expandable coupling arrangement as claimed in claim 17, wherein the deformable sealing material is adapted to be energised during expansion of the coupling.
19. An expandable coupling arrangement as claimed in claim 2, wherein the material properties of the male and female thread portions are selected to facilitate or improve relative movement between corresponding flanks during expansion.
20. An expandable coupling arrangement as claimed in claim 2, wherein the coupling arrangement is adapted to be expanded using a rotary expansion tool, and wherein the thread portions define a thread which is cut in an opposite direction to the intended direction of rotary expansion of the coupling.

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21. An expandable coupling arrangement as claimed in claim 2, wherein the male and female thread portions are of a dove-tail thread profile.
22. An expandable coupling arrangement as claimed in claim 2, wherein the male and female thread portions are of a square profile.
23. An expandable coupling arrangement as claimed in claim 2, wherein the thread portions are axially parallel.
24. An expandable coupling arrangement as claimed in claim 2, wherein the thread portions are tapered.
25. An expandable coupling arrangement as claimed in claim 2, wherein the male thread portion is a pin connector.
26. An expandable coupling arrangement as claimed in claim 2, wherein the female thread portion is a box connector.
27. An expandable coupling arrangement as claimed in claim 2, wherein the first tubular has a leading end portion adapted to be radially constrained by the second tubular.
28. An expandable coupling arrangement as claimed in claim 2, wherein the second tubular defines an undercut groove adapted to receive the leading end portion of the first tubular.
29. A method of providing an expanded tubular coupling, said method comprising the steps of:

providing a first tubular including a male thread portion on an end thereof and a second tubular including a female thread portion on an end thereof, the thread portions having flanks;

engaging the male and female threaded portions to form a tubular coupling wherein at least one flank of the male thread portion abuts a corresponding flank of the female thread portion, and the remaining corresponding flanks of the thread portions define gaps therebetween; and

expanding the tubular coupling, whereby relative axial movement between corresponding flanks during expansion of the coupling is accommodated by the gaps.

30. A method of providing an expanded tubular coupling as claimed in claim 29, wherein the tubular coupling is expanded using a rotary expansion tool, said rotary expansion tool causing the male thread portion to axially extend and the female thread portion to axially contract.

31. A method of providing an expanded tubular according to claim 29, wherein the tubular coupling is expanded using a cone expansion tool, said cone expansion tool causing the male thread portion and the female thread portion to axially contract at different rates.

32. A method of providing an expanded tubular according to claim 29, wherein the tubular coupling is expanded using hydraulic pressure.